

Title (en)  
POWER CONVERSION DEVICE

Title (de)  
STROMUMWANDLUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE CONVERSION DE PUISSANCE

Publication  
**EP 3771069 A4 20220112 (EN)**

Application  
**EP 18910257 A 20180319**

Priority  
JP 2018010813 W 20180319

Abstract (en)  
[origin: EP3771069A1] This uninterruptible power supply includes: a cooler (6) that dissipates heat of a converter (1) and an inverter (5); and a controller (8) that causes, when output power ( $P_o$ ) from the inverter (5) exceeds an upper limit value ( $P_{oH}$ ), reduces input power ( $P_i$ ) to the converter (1) by power ( $\Delta P_o = P_o - P_{oH}$ ) corresponding to a difference between them, and increases input power ( $P_b$ ) to a bidirectional chopper (4) by power ( $2 \times P_{oH}$ ) that is twice as high as the power ( $\Delta P_o$ ) corresponding to the difference.

IPC 8 full level  
**H02J 9/06** (2006.01); **H02J 3/32** (2006.01); **H02M 5/458** (2006.01)

CPC (source: EP KR US)  
**H02J 3/32** (2013.01 - EP KR US); **H02J 9/06** (2013.01 - EP KR); **H02J 9/061** (2013.01 - US); **H02J 9/062** (2013.01 - US);  
**H02M 1/32** (2013.01 - KR US); **H02M 5/4585** (2013.01 - EP); **H02M 7/02** (2013.01 - KR); **H02M 7/48** (2013.01 - US); **H05K 7/2089** (2013.01 - US)

Citation (search report)  
• [A] KR 20160001883 A 20160107 - KOREA ENERGY RESEARCH INST [KR]  
• See references of WO 2019180784A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3771069 A1 20210127; EP 3771069 A4 20220112;** CN 111869042 A 20201030; CN 111869042 B 20220802; JP 6886076 B2 20210616;  
JP WO2019180784 A1 20200903; KR 102441119 B1 20220906; KR 20200130425 A 20201118; US 11133678 B2 20210928;  
US 2021098991 A1 20210401; WO 2019180784 A1 20190926

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**EP 18910257 A 20180319;** CN 201880091391 A 20180319; JP 2018010813 W 20180319; JP 2020508123 A 20180319;  
KR 20207029399 A 20180319; US 201816981876 A 20180319